

REMARKS

The description has been amended to include the reference numeral 16 on page 3 line 2. The insert corresponds to the wording of claim 1 and also page 1 lines 5 and 6.

In claim 1 the phrase "and normal to said slot-like flat channels 5a, 5b" has been removed since it does not sound right. It was meant to indicate the orientation of the plane which extends along the longitudinal axis 16 between the flat channels 14a and 14b (and which extends normal to the planes of those flat channels).

In any case,

the two slot-like channels 5a, 5b, which extend at an angle with respect to, and from opposite side of, a plane extending along a longitudinal axis of the micromixer such that the channels 5a, 5b intersect each other in mutually spaced relationship and in alternating fashion at an exit area to the mixing chamber (4). There the channels form a common exit cross-section with alternately arranged outlets of the slot-like flat channels 5a, 5b for the different fluids a, b with webs 3a, 3b disposed between the adjacent channels, which, at the exit cross-section, have a height of less than 500 μm . The channels 5a, 5b in the guide component have a cross-section which decreases toward the exit area.

With this arrangement, the flow of the gases a and b is not only supplied to the mixing chamber in alternating thin flow sheets, but also in a transversely intersecting fashion so that the different fluid flows cannot form laminar flow sheets moving parallel along one another but are angled toward the side walls of the mixing chamber so as to cross one another. This generates turbulence for intermixing the thin alternating flow sheets of the two different fluids which turbulence is further enhanced by the fluid flows being directed toward the respective side walls of the mixing chamber from where they are again reflected back toward the center of the mixing chamber.

Clearly, the cited reference does not disclose, nor does it suggest, to arrange in front of the mixing chamber a guide component which includes for each of the fluid flows at least two slot-like flat channels which extend at an angle with respect to, and from opposite sides of, a plane extending along a longitudinal axis of the micro-mixer such that the channels in-

tersect each other in mutually spaced relationship and in an alternating fashion at an exit area to the mixing chamber.

Reconsideration of claim 1 as amended is respectfully requested.

Claims 2 and 3 are dependent on claim 1 and consequently include all the features of claim 1 so that they should be patentable together with claim 1.

Claim 4 has been objected to by the Examiner as depending on a rejected claim,, but the Examiner has indicated that, it would be allowable if rewritten to include all the limitations of the base claim.

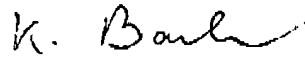
Since claim 1 is now believed to be in an allowable form, also claim 4 should be allowable.

Claims 5 to 7 define different ways of obtaining the flow passages in the guide component, that is, different ways of preparing the guide components with the passages formed therein and claim 8 defines a preferred height of the webs between the flow passages at the exit area to the mixing chamber.

These claims are all directly dependent on claim 1 and should therefore be allowable already for that reason.

Reconsideration of the dependent claims and allowance of claims 1 – 9 is solicited.

Respectfully submitted,



Klaus J. Bach, Reg. No. 26832